

## Attachment B

### R-CAT Assumptions

Proposal Name:	Documentation Page
This page is intended to help you record and communicate the assumptions and calculations that feed the risk and cost analysis tool package spreadsheet	Response / Information Column
Was the analysis prospective (projecting activities, costs and revenues that are planned by the proposal) or retrospective (using actual acres, revenues and costs in an analysis looking back over the life of the project)?	Prospective
Start year rationale:	If selected treatments are anticipated to commence in 2011
End year rationale:	The project work plan is proposed to extend through 2019.
Duration of treatments rationale:	Based on professional estimations provided by the forest fuels officer and forest Silviculture department treatments are expected to remain effective with out maintenance.
<b>All dollar amounts entered should reflect undiscounted or nominal costs</b> , as they are discounted automatically for you in the R-CAT spreadsheet tool? Did you provide undiscounted costs, and in what year data are your costs and revenues provided.	Yes costs and revenues are based on 2010 nominal estimates.
Average treatment cost per acre rationale:	Assumed \$1,000 per acre treatment cost for fuels treatments x 540 footprint acres = \$540,000. Timber sales cost an average of \$100 per 1,000 board feet to lay out x 8,000 feet per acre = \$800 per acre x 1,000 acres = \$800,000 for timber sale layout. Total cost = \$1,340,000 to treat 1,540 acres which equals \$870 per acre treatment cost.
Rationale for actual costs per acre of treatment by year is used:	Forest experience has shown treatment costs to be \$1,000 to \$1,600 per acre for fuels treatments (thin, prune, handpile, handpile burn). Based on the scale of this project, we think contractors would bid closer to the \$1,000 per acre figure.

Average treatment revenue per acre rationale:	Revenues are based on the experiences of timber staff who have been working on this type of silvicultural practices and current utilization competition. Assuming revenue = cost of layout + 'profit', we figure we would have revenue of \$140 per mbf (\$100 for layout + \$40 'profit' x 8 mbf per acre = \$1,120 per acre x 1,000 acres of timber sales = \$1,120,000 div by 1540 acres = \$727/ac.
This tool is intended to be used to estimate <b>Forest Service fire program costs only</b> , did you conduct your analysis this way or have you taken an all lands approach?	Fire Program Costs only.
Total treatment acres calculations, assumptions:	The total treatment acre figure was obtained based on the current capacity for the forest to complete work with the FS appropriated dollars and the match from the CFLRP. A total of 15400 acres of treatment broken out as 10,000 ac of commercial treatment and 5400 acres of non comercial treatments.
Treatment timing rationale with NEPA analysis considerations:	Treatment timing was based on an even flow of work over the 10 year lifespan of the Act.
Annual Fire Season Suppression Cost Estimate Pre Treatment, Assumptions and Calculations	The 10 year Forest average large fire cost per acre increased by the a average fire history acres for the analysis area. 10 year average acres burned 53,385 at an average cost of \$25,648,797.60 = \$480/ac. Average 10 year fire history for the analysis area equaled 619 ac at a cost of \$297,120.
Did you use basic Landfire Data for you Pretreatment Landscape?	No
Did you modify Landfire data to portray the pretreatment landscape and fuel models?	No time.
Did you use ArcFuels to help you plan fuel treatments?	No time.
Did you use other modeling to help plan fuel treatments, if so which modeling?	No time.
Did you model fire season costs with the Large Fire Simulator?	No time.
If, so who helped you with this modeling?	No
If not, how did you estimate costs, provide details here:	No
Did you apply the stratified cost index (SCI) to your Fsim results?	No
Who helped you apply SCI to your FSIM results?	
Did you filter to remove Fsim fires smaller than 300acres and larger than a reasonable threshold?	No

What is the upper threshold you used?	
Did you use median pre treatment costs per fire season?	
Did you use median post treatment costs per fire season?	
Did you test the statistical difference of the fire season cost distributions using a univariate test?	No
What were the results?	
Did you estimate Burned Area Emergency Response (BAER) costs in you analysis?	Yes
Did you use H codes or some other approach to estimate these costs?	No
Did these cost change between pre and post treatment?	Yes
Did you estimate long term rehabilitation and reforestation costs in your analysis?	No
How did you develop these estimates, and did these cost change between pre and post treatment?	Based on 3% of the suppression cost for the project area.
Did you include small fire cost estimates in your analysis?	Yes
If so, how did you estimate these costs, what time period is used as a reference, and did these cost change between pre and post treatment?	The 10 year average cost estimate for small fires pulled from the KCFAST program.
Did you include beneficial use fire as a cost savings mechanism in your analysis?	Yes
How did you estimate the percent of contiguous area where monitoring is an option for pretreatment landscape?	This was estimated based on the Use of Wildland Fire Forest plan amendment signed in 2010.
How did you estimate the percent of contiguous area where monitoring is an option for post treatment landscape, and why did you select the percentage of your landscape for low, moderate and high?	The Fire Amendment signed in 2010 allows the option for the use of wildland fire on every acre of the Rogue River-Siskiyou National Forest

How did you derive an estimate for the percentage of full suppression costs used in fire monitoring for beneficial use?	This was derived from conservative Forest Fire Staff estimates. The forest has not the ability to use wildfire for resource benefit until this year 2011.
Did you ensure that you clicked on all the calculation buttons in cells in column E after entering your estimates?	Yes
Did you make any additional modifications that should be documented?	